

■ Features:

- Can be used for high frequency bands up to GHz and stable inductance at high frequency
- The high self resonant frequency realizes high Q value
- Low DC resistance design is ideal for low loss, high output and low power consumption

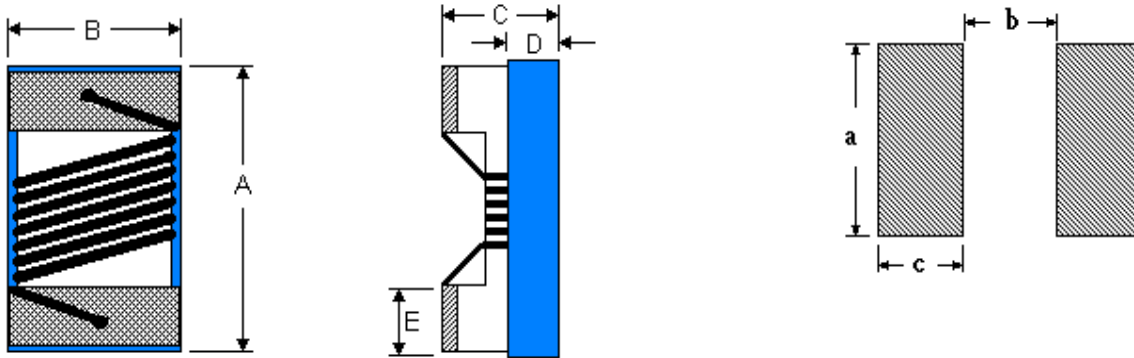
■ Applications:

- For high-frequency applications including mobile phones, portable phones, such as PA, ANT, VCO, SAW, etc
- Mobile phones such as GSM, CDMA, PDA, etc
- Bluetooth, W-LAN

■ Parts code:

NLC 0402	10N	J
Type	Inductance code	Tolerance

■ Recommended Land Pattern:



Dimensions in mm

TYPE	A	B	C	D	E	a	b	c
NLC 0402	1.27 max	0.76 max	0.61 max	0.15 Ref	0.23	0.66	0.46	0.50
NLC 0603	1.80 max	1.20 max	1.02 max	0.45 Ref	0.33	1.02	0.64	0.64
NLC 0805	2.40 max	1.65 max	1.45 max	0.65 Ref	0.44	1.78	0.76	1.02
NLC 1008	2.90 max	2.54 max	2.03 max	1.30 Ref	0.45	2.54	1.27	1.02

■ Package:

TYPE	NLC 0402	NLC 0603	NLC 0805	NLC 1008
Q'TY / Reel	4000	3000	2000	2000

■ Operating temperature range from -40°C to 125°C.

Storage Temperature: -10°C to +40°C, 70% RH max.

### ■ Specifications

Inductance			NLC 0805			
			Q / MHz	SRF	DCR	IDC
Code	nH / MHz	Tolerance	(Min)	(GHz) Min	( $\Omega$ ) Max	(mA) Max
2N0	2.0 / 250	B,S	70 / 1500	8.00	0.03	800
3N9	3.9 / 250	B,S	70 / 1500	5.75	0.04	800
4N7	4.7 / 250	B,S	70 / 1500	5.75	0.04	800
6N8	6.8 / 250	B,J,K	70 / 1500	5.50	0.06	800
7N5	7.5 / 250	B,J,K	70 / 1000	4.50	0.06	800
8N2	8.2 / 250	B,J,K	70 / 1000	4.70	0.06	800
10N	10 / 250	G,J,K	70 / 1000	4.20	0.08	600
12N	12 / 250	G,J,K	80 / 1000	4.00	0.08	600
15N	15 / 250	G,J,K	80 / 1000	3.40	0.10	600
18N	18 / 250	G,J,K	80 / 1000	3.30	0.10	600
22N	22 / 250	G,J,K	60 / 500	2.60	0.12	600
24N	24 / 250	G,J,K	60 / 500	2.00	0.12	600
27N	27 / 250	G,J,K	60 / 500	2.50	0.12	600
33N	33 / 250	G,J,K	60 / 500	2.05	0.13	600
36N	36 / 250	G,J,K	65 / 500	1.70	0.13	600
39N	39 / 250	G,J,K	65 / 500	2.00	0.15	600
43N	43 / 200	G,J,K	65 / 500	1.65	0.15	600
47N	47 / 200	G,J,K	65 / 500	1.65	0.17	600
56N	56 / 200	G,J,K	65 / 500	1.55	0.19	600
68N	68 / 200	G,J,K	60 / 500	1.45	0.22	500
82N	82 / 150	G,J,K	55 / 500	1.30	0.40	400
R10	100 / 150	G,J,K	55 / 500	1.20	0.52	400
R12	120 / 150	G,J,K	50 / 250	1.10	0.55	400
R15	150 / 150	G,J,K	50 / 250	0.92	0.73	400
R18	180 / 100	G,J,K	50 / 500	0.87	0.88	400
R22	220 / 100	G,J,K	50 / 500	0.85	1.18	340
R24	240 / 100	G,J,K	48 / 250	0.69	1.20	330
R27	270 / 100	G,J,K	48 / 250	0.65	1.36	310
R33	330 / 100	G,J,K	40 / 250	0.60	1.40	300
R39	390 / 100	G,J,K	25 / 250	0.56	1.50	290
R47	470 / 50	G,J,K	25 / 100	0.38	1.76	250
R56	560 / 25	G,J,K	23 / 100	0.34	1.90	210
R62	620 / 25	G,J,K	23 / 100	0.22	2.00	205
R68	680 / 25	G,J,K	23 / 100	0.20	2.15	200
R75	750 / 25	G,J,K	20 / 100	0.20	2.25	185
R82	820 / 25	G,J,K	20 / 100	0.20	2.50	170
1R0	1000 / 25	G,J,K	15 / 50	0.10	2.60	170

■ Notes: Tolerance: B ( $\pm 0.2nH$ ), S ( $\pm 0.3nH$ ), G ( $\pm 2\%$ ), J ( $\pm 5\%$ ), K ( $\pm 10\%$ )